

Title (en)

Ink jet printer with bubble introducing means in ink chamber

Title (de)

Tintenstrahldrucker mit einer Vorrichtung zum Einbringen einer Blase in die Tintenkammer

Title (fr)

Imprimante à jet d'encre avec des moyens pour introduire une bulle dans la chambre à encre

Publication

EP 0496533 B1 20011024 (EN)

Application

EP 92300387 A 19920116

Priority

- JP 322792 A 19920110
- JP 473991 A 19910119
- JP 474091 A 19910119

Abstract (en)

[origin: EP0496533A1] Delay of refilling to be conducted immediately after the first discharge in the continuous discharge can be restricted. Adequate air bubbles (9,10) which do not adversely affect discharge can be formed by means of the air bubble forming unit, such as a sub-heater for heating the ink reservoir portion, such as a common liquid chamber (15). The formed air bubbles (9,10) function as the buffers and thereby absorb the discharge energy (pressure waves) directed toward the common liquid chamber (15) during discharge to restrict flow of the ink in the direction opposite to the discharge port. That is, refilling after discharge can be quickly performed. <IMAGE>

IPC 1-7

B41J 2/055

IPC 8 full level

B41J 2/175 (2006.01); **B41J 2/05** (2006.01); **B41J 2/055** (2006.01); **B41J 2/14** (2006.01); **B41J 2/16** (2006.01); **B41J 2/18** (2006.01); **B41J 2/185** (2006.01)

CPC (source: EP US)

B41J 2/055 (2013.01 - EP US); **B41J 2/14145** (2013.01 - EP US); **B41J 2002/14379** (2013.01 - EP US)

Cited by

US6151049A; US6109735A; EP0873869A3; US6164763A; EP0890439A3; EP0737580A3; US6877835B2; US6102529A; EP0591989A3; US5777649A; EP0739734A3; US6007187A; EP0551752A3; US6050669A; CN1072116C; EP0684134A3; US6109734A; US6270199B1; US6554383B2; US6174050B1; US6331050B1; US6476926B1; US6773092B1; WO2007008998A3; US6457816B1; US6183068B1; US6447093B1; US6213592B1; US6241350B1; US7837310B2

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL PT SE

DOCDB simple family (publication)

EP 0496533 A1 19920729; **EP 0496533 B1 20011024**; **EP 0496533 B8 20021009**; AT E207415 T1 20011115; AU 1031392 A 19920723; AU 654168 B2 19941027; CA 2059612 A1 19920720; CA 2059612 C 20021008; CN 1064046 A 19920902; CN 1078534 C 20020130; DE 69232144 D1 20011129; DE 69232144 T2 20020606; HK 1013048 A1 19990813; JP 2980444 B2 19991122; JP H0531904 A 19930209; KR 920014632 A 19920825; KR 970000090 B1 19970104; TW 222336 B 19940411; US 2001019348 A1 20010906; US 6260962 B1 20010717

DOCDB simple family (application)

EP 92300387 A 19920116; AT 92300387 T 19920116; AU 1031392 A 19920117; CA 2059612 A 19920117; CN 92100306 A 19920118; DE 69232144 T 19920116; HK 98112752 A 19981203; JP 322792 A 19920110; KR 920000693 A 19920118; TW 81100379 A 19920120; US 28056594 A 19940725; US 76563601 A 20010122